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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/895,234	06/29/2001	Patrick Joseph Bohrer	AUS920010123US1	8647

7590 01/28/2005

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EXAMINER	
CHEN, TE Y	

ART UNIT	PAPER NUMBER
2161	

DATE MAILED: 01/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/895,234	BOHRER ET AL.	
	Examiner	Art Unit	
	Susan Y Chen	2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 June 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21 and 25-27* is/are pending in the application.

4a) Of the above claim(s) *18-21 and 25-27* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Am ndment

Election/Restrictions

This office action is responsive to the Election of Restriction filed on June 23, 2004. Applicant has elected claims 1-17 without traverse for prosecution.

Claims 1-17 are pending for examination, claims 1-4 and 10-11 have been amended.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 and 10-14, are rejected under 35 U.S.C. 102(b) as being anticipated by Tzelnic et al. (6,061,504).

As to claims 1-2 and 10-11, Tzelnic et al. (thereinafter referred as Tzelnic) discloses a data processing system with means, method and program product to perform the following functions as claimed by applicant, comprising:

* to determine a first network transfer rate of a variable network transfer rate Internet connection between a first client and a server [e.g., col. 5, lines 18-50, lines 57-61; col. 8, lines 42-65; Fig(s). 2-5 and associated texts]; and

* retrieving a portion of the requested data from a disk via a server in responsive to a client request via the variable network connection [e.g., col. 6, lines 24-32; col. 7, lines 28 – col. 9, line 13; Fig(s). 4-5 and associated texts];

*initiating transmission of the first part of data to the client via the variable network transfer rate connection [e.g., col. 7, lines 53 - col. 8, lines 8; col. 8, lines 42-65; Fig(s). 2-5 and associated texts];

*calculating the time required to transmit the portion of data to the client based on the determined network transfer rate [e.g., see Fig(s). 14-15 and associated texts; col. 10, lines 44-67; col. 20, line 58 – col. 22, line 26];

* determining when to retrieve a subsequent portion of the requested data from the disk and transmit the subsequent portion to the client based on whether the calculated time is expired [e.g., see col. 10, lines 39 - col. 12, lines 26-43];

* wherein the variable network transfer rate connection including a standard Internet Simple Network Management Protocol (SNMP) [e.g., col. 8, lines 16-19] and TCP/IP [e.g., col. 8, lines 55-56] connections via a network server interface [e.g., the unit 73, Fig. 5; col. 8, lines 55 – 65].

As to claim 3, except the features recited in claim 1, Tzelnic further discloses that each time a data request is received, the system determines the network transfer rate of

the variable network transfer rate connection [e.g., Fig(s). 16-17 and associated texts; col. 22, line 53 - col. 23, line 21; col. 24, lines 31-54].

As to claim 12, the claimed feature to retrieve a first block for retrieving a first portion of the requested data is a standard default disk operation.

As to claims 4 and 13, Tzelnic further discloses the claimed feature: delaying retrieval of subsequent portion until the calculated time is expired to minimize the server memory required for completing the file request [see Tzelnic: col. 12, lines 44-67].

As to claims 5 and 14, Tzelnic further discloses the claimed feature: determining when to retrieve the subsequent portion based on the distance between the current head position and the disk location of the subsequent portion of data [e.g., see Tzelnic: col. 20, lines 30-36, line 38-50].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6-9 and 15-17, are rejected under 35 U.S.C. 103(a) as being unpatentable over Tzelnic et al. (6,061,504) in view of Henson et al. (U.S. Patent No. 5,465,343) and further in view of Kataoka Nobuhiro (JP357125452A).

As to claims 6-9 and 15-17, Tzelnic discloses all the features as recited in claims 1-5 and 10-14 above, he further discloses the system has at least one disk [e.g. the integrated cached disk array storage subsystem (23), Fig. 1] coupled to a plurality of network servers [e.g., the media server (20), the stream server(21), etc. Fig. 2] to perform the steps cited in claims 1-5 and 10-14.

However, he did not expressly disclose: 1) the system monitoring the position of the disk head while the first part of data is being transmitted to the client; and 2) retrieving the data associated with subsequent request based on if the data is closer to the current position of a disk head than the data for the subsequent portion of the next request.

However, Henson et al. (thereinafter referred as Henson) disclosed the first system monitoring feature as claimed by applicant [e.g., the micro-controller at col. 3, line 58 – col. 4, line 2].

Furthermore, Kataoka Nobuhiro expressly discloses a data storage system that retrieves data associated with subsequent request if the data is closer to the current head position than the data associated with the subsequent portion of the first file request [e.g., see Kataoka Nobuhiro: Abstract lines 1-3].

Thus, it would have been obvious to an ordinary skilled person in the art, at the time the invention was made, to modify Tzelnic's system admission control policy [col. 2, line 31-35, lines 51-59] with the monitor (or the micro-controller) processing as taught by Henson, because by doing so, the modified stream servers would permit a supervising processing, which monitors the flow of absolute position data and user data blocks to and from the disk via the head structure and verify the integrity of, or correcting errors in data retrieved from the disk.

In addition, one ordinary skilled artisan at the time the invention was made can further modify the disk head position monitoring processing of the combined system for retrieving the subsequent data portion from a nearest sector to the current disk head position in respond to the subsequent file request as taught by Kataoka Nobuhiro, because by do so, the system can minimize I/O latency time and maximize the system throughput.

As to claims 7-9 and 16-17, except all features discussed above, the combined system of Tzelnic, Henson and Kataoka Nobuhiro further disclose that the retrieving of a subsequent portion of data for the next request is based on the determination of the head position and the expiration time associated with the file request [e.g., see Henson: the data transducer head, col. 7, line 61 - col. 8, line 1; col. 10, lines 9-22; Tzelnic: col. 12, lines 26-43].

R sponse to Arguments

Applicant's arguments filed 04/22/2004 have been fully considered but they are not persuasive.

The examiner disagrees with applicant argument that "Nowhere in Tzelnic is there any teaching to determine the data rate of a variable network transfer rate connection (as recited in claim 1) such as a TCP/IP connection (recited in claim 2) between a client and a server."

In reply to this argument, the examiner first points out that the prior art on record as issued to Tzelnic clearly disclosed the claimed clients [e.g., the unit 54, Fig. 1] and servers [e.g., the units: file server 20, stream server 21, control servers 28 & 29, Fig. 1] being connected by a network [e.g., the units: 25, Fig. 1], wherein, the communication between the claimed clients and servers including Internet Simple Network Management Protocol (SNMP) [e.g., col. 8, lines 16-19] and TCP/IP [e.g., col. 8, lines 55-56] protocol that are being connected (or ported) to the claimed clients/servers via a network server interface [e.g., the unit 73, Fig. 5; col. 8, lines 55 – 65]. Therefore, the program logic of the network server software [e.g., the software 60, Fig. 5 and associated texts] clearly will determine the connection of TCP/IP via the network server framework and the standard Internet Simple Network Management Protocol to synchronize various network transfer rate [e.g., col. 6, lines 19-40].

The examiner further disagrees with applicant's argument under 35 U.S.C. 103 (a) rejection as cited on record. In reply to this argument the examiner points out it is noted that the features upon which applicant relies (i.e., using physical proximity information to prioritize handling of various requests) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Based on the discussion recited above, the examiner maintains the same type of rejections.

Conclusion

To expedite the process of re-examination, the examiner requests that all future correspondences in regard to overcoming prior art rejections or other issues (e.g. 35 U.S.C. 112) set forth by the Examiner prior to the office action, that applicant should provide and link to the most specific page and line numbers of the disclosure where best support is found (see 35 U.S.C. 132).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Carroll et al. (U.S. Patent No. 6,016,507) which discloses a system to delete a portion of a video or audio file prior to the completion of broadcast;

Swales et al. (U.S. Patent No. 6,151,625) which discloses an internet web interface including programmable logic controller to control output devices based on status of input devices.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Y Chen whose telephone number is 571-272-4016. The examiner can normally be reached on Monday - Friday from 7:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Susan Y Chen
Examiner
Art Unit 2161

January 22, 2005

UYEN LE
PRIMARY EXAMINER